finger shoals project to the middle of the basin from the western margin and a large tidal delta from Ocracoke Inlet merges with Bluff Shoal from the east.

Four river systems, the Chowan, Roanoke, Tar/Pamlico, and Trent/Neuse, provide 78.9% of the freshwater input to the APES region (Table 1). The remainder is supplied directly by precipitation and local runoff. The most important hydrologic feature of the rivers is the small volume of freshwater that they deliver and, as a result, the long residence time of water in the basins (45 days in Albemarle Sound, Copeland et al., 1983; 32 days in the Neuse River estuary, Knowles, 1975). According to data from Giese et al. (1979), approximately 14 months would be required to fill the APES basins at the average annual rate of volume inflow of 28.3 km³/yr.

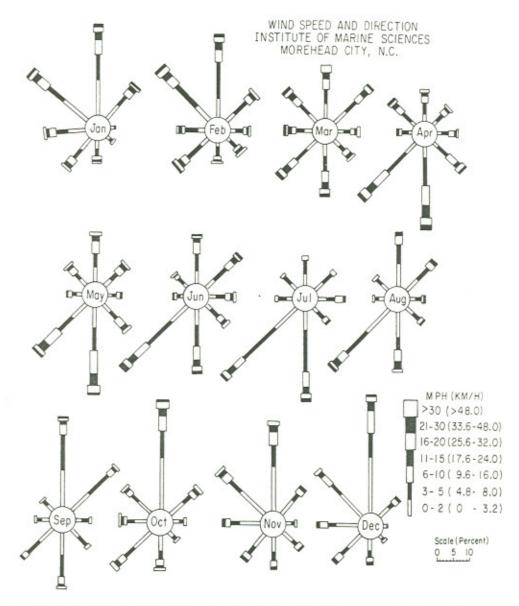


Figure 2. Distribution of wind speed and direction summarized by month from archived data (1979-1981) taken near Beaufort Inlet.